

Scott M. Matheson
Governor



STATE OF UTA.
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110-2500

July 8, 1983

Kenneth Lee Alkema, Director
Room 474 801-533-6121

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS

Community Health Services
Environmental Health
Family Health Services
Health Care Financing

OFFICES

Administrative Services
Community Health Nursing
Management Planning
Medical Examiner
State Health Laboratory

Kent Dahlquist
Mine Engineer
Union Carbide Corp.
La Sal, Utah 84530

RE: Hecla Pond Design

Dear Mr. Dahlquist

We have reviewed the Hecla Plan information and the water quality analyses of the seepage below the pond. The enclosed state sample 831294 indicates gross alpha and beta concentrations in excess of the state standards in the wash below the seepage from this facility. The analyses you submitted May 27, 1983 also indicates Uranium seepage concentrations of 5 and 28 mg/l exceeding the EPA discharge standard of 4 mg/l maximum.

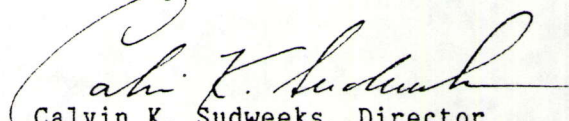
The flow rate of 65 gpm into the unlined ponds having a volume of 2 million gallons further indicates inadequate pond capacity to adequately contain the uranium contaminated water. It is important that ponds of this nature be adequately sealed to prevent excessive seepage. If the sealed ponds are not adequate to totally contain the water, additional treatment would be needed to assure compliance with federal and state effluent standards.

Therefore, we request that by August 10, 1983 Union Carbide submit to this office a proposed Hecla wastewater compliance schedule. This schedule must include proposed dates and description for the following actions:

1. Immediate interim control of seepage.
2. Submittal of design plans and specifications for approval.
3. Start of construction for an approved treatment system.
4. Completion of approved treatment system.

Please contact Steven McNeal of this office if you desire to discuss the compliance schedule or wastewater disposal regulations for the design of this system.

Sincerely,


Calvin K. Sudweeks, Director
Bureau of Water Pollution Control

SRM/na

cc: Oil, Gas and Mining, Tom Tetting
Southeastern Utah District Health
EPA, Denver

0067

DATE AND TIME REPORTED 2 JUN 1983 11:26:02 PM

SAMPLE NO:	831294.	DATE COLLECTED:	42083.
ACCESSION NO:	830126.	TIME COLLECTED:	1120.
STOREY/SYSTEM NO:	0.	DATE RECEIVED:	42284.
SAMPLE TYPE:	ENVIRON	SUBMITTED BY:	HWPC

SAMPLING LOCATION: WASH BL UNION CARBIDE HELCA MINE POND

ANALYSIS	PCI/L	SAMPLE ERROR	ACTION LEVEL

GR ALPHA	101.	*****	15.
GR BETA	95.	*****	50.
RA-226	1.	0.	3.

ALERT: ACTION LIMIT FOR GR ALPHA HAS BEEN EXCEEDED--SEE BELOW

ALERT: ACTION LIMIT FOR GR BETA HAS BEEN EXCEEDED--SEE BELOW

***** COMMENTS *****

- 1) AN ALPHA ON A DRINKING WATER WHICH EXCEEDS 5 PCI/L. REQUIRES RA-226
- 2) AN ALPHA ON A DRINKING WATER WHICH EXCEEDS 15 PCI/L. REQUIRES URANIUM
- 3) AN RA-226 ON A DRINKING WATER WHICH EXCEEDS 3 PCI/L. REQUIRES RA-228

ESTIMATED MINIMUM DETECTABLE CONCENTRATION (MDC).

500 ML SAMPLE

GROSS ALPHA.....2.0 PCI/L

GROSS BETA.....10.0

TRITIUM.....500.0

RA-226.....0.5

RA-228.....1.0

FOR CONSULTATION OR ASSISTANCE PLEASE CALL ENVIRONMENTAL HEALTH SERVICES,
BUREAU OF PUBLIC WATER SUPPLY. PHONE 801-533-4207